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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---|-------------|----------------------|---------------------|------------------|
| 10/573,698 | 12/07/2006 | Willibald Konrath | 4015-5819 | 7114 |
| 24112 | 7590 | 10/21/2010 | EXAMINER | |
| COATS & BENNETT, PLLC 1400 Crescent Green, Suite 300 Cary, NC 27518 | | | KASENGE, CHARLES R | |
| | | | ART UNIT | PAPER NUMBER |
| | | | 2121 | |
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

| | | | |
|------------------------------|------------------------|---------------------|--|
| Office Action Summary | Application No. | Applicant(s) | |
| | 10/573,698 | KONRATH ET AL. | |
| | Examiner | Art Unit | |
| | CHARLES R. KASENGE | 2121 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on 03 August 2010.
 2a) This action is **FINAL**. 2b) This action is non-final.
 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 15-27 and 29-34 is/are pending in the application.
 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
 5) Claim(s) 29-34 is/are allowed.
 6) Claim(s) 15, 17 and 21-27 is/are rejected.
 7) Claim(s) 16 and 18-20 is/are objected to.
 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
 10) The drawing(s) filed on 07 December 2006 is/are: a) accepted or b) objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ . |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____. | 6) <input type="checkbox"/> Other: _____ . |

DETAILED ACTION

Response to Arguments

1. Applicant's arguments, see Remarks, filed 8/3/10, with respect to the rejection(s) of the claim(s) under 35 U.S.C. 103(a) have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of Schuster et al. U.S. Patent 5,086,397.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 15, 17 and 21-27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Schuster et al. U.S. Patent 5,086,397.

4. Regarding claims 15, Schuster discloses a method of manufacturing a high-frequency assembly having a plurality of components, at least one of which is frequency-specific, using an automatic assembly apparatus, the method comprising: placing a plurality of components on a high-frequency assembly (i.e. product) using a placing apparatus (i.e. col. 3 and 4, lines 14-9; col. 5, lines 22-25); identifying a frequency-encoding feature (i.e. conductive material) on a frequency-specific component (i.e. PCB) prior to gripping the frequency-specific component with the placing apparatus (i.e. col. 7 and 8, lines 48-17; col. 9, lines 28-32); accepting the frequency-specific component for connection to the high-frequency assembly if the frequency-

encoding feature indicates that the frequency-specific component is a correct component for the assembly (i.e. col. 8, lines 18-40); and rejecting the frequency-specific component for connection to the high-frequency assembly if the frequency-encoding feature indicates that the frequency-specific component is not the correct component for the assembly (i.e. col. 6 and 7, lines 59-9).

Regarding claim 15, Schuster discloses an assembly step (col. 3 and 4, lines 59-9) but does not explicitly disclose a placing apparatus for placing a plurality of components on an assembly.

Official notice is taken that using a placing apparatus to assemble components for an electronic product was well known at the time the invention was made in the analogous art of electronic device manufacturing.

At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to use a placing apparatus to place components when assembling an electrical device. One of ordinary skill in the art would have been motivated to do this since placing apparatuses are commonly used in the assembly of electronics.

Therefore, it would have been obvious to modify Schuster to obtain the invention as specified in claim 15.

Regarding claim 17, Schuster discloses searching for the frequency-encoding feature at a plurality of locations on the frequency-specific component (col. 7, lines 10-47); and determining an orientation of the frequency-specific component based on a location at which the frequency-encoding feature is found in relation to a reference edge of the component (col. 7, lines 10-47).

Regarding claim 21, Schuster discloses detecting an outline of the frequency-specific component; locating the frequency-encoded feature based on the detected outline of the frequency-specific component; and determining an orientation of the frequency-specific component based on the located frequency-encoded feature (col. 7, lines 10-47).

Regarding claim 22, Schuster discloses the method wherein the frequency-specific component comprises a circuit board (col. 3, lines 14-54).

Regarding claim 23, Schuster discloses the method of claim 22 wherein the frequency-encoded feature comprises a conductive material (col. 9, lines 28-32).

Regarding claim 24, Schuster discloses the method of claim 15 wherein the frequency-specific component comprises a mechanical component (col. 4, lines 1-9).

Regarding claim 25, Schuster discloses the method of claim 24 wherein the mechanical component comprises a cover (i.e. chassis) that covers a mounted component (i.e. col. 4, lines 1-9; also a plastic cover over electronic component (processor, resistors, etc.) is a mechanical component cover).

Regarding claim 26, Schuster discloses the method of claim 15 wherein the frequency-encoded feature comprises a bore (col. 3, lines 46-54).

Regarding claim 27, Schuster discloses the method of claim 15 wherein the frequency-encoded feature comprises an indication printed on the frequency-specific component (col. 7, lines 33-47).

Allowable Subject Matter

5. Claims 29-34 are allowed.

6. Claims 16 and 18-20 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to CHARLES R. KASENGE whose telephone number is (571)272-3743. The examiner can normally be reached on Monday through Friday, 8:30 - 5 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Albert DeCady can be reached on 571 272-3819. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

CK
October 20, 2010

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/Charles R Kasenge/
Primary Examiner, Art Unit 2121